AMENDMENTS TO THE CLAIMS:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) ~~Method~~ A method of ~~carburizing~~ carburizing, at subatmospheric pressures, a treatment gas containing hydrocarbons being supplied to a treatment chamber and an exhaust stream exiting from the treatment chamber, comprising the steps of:

~~characterized in that~~ determining the opacity of the gaseous atmosphere prevailing in the treatment chamber [[(3)]] and/or the opacity of the exhaust stream [[(4)]] exiting from the treatment chamber [[(3)]] ~~is determined~~ and, as a function of the determined opacity, regulating the feeding of the hydrocarbon-containing treatment gas [[(1)]] into the treatment ~~chamber, (3) is regulated~~ chamber.

2. (currently amended) ~~Method~~ A method according to Claim 1, further comprising the step of interrupting ~~characterized in that, when an opacity value, which is set or can be set, is exceeded,~~ the feeding of the hydrocarbon-containing treatment gas [[(1)]] into the treatment chamber when an opacity value, which is set or can be set, is exceeded ~~(3) is interrupted~~.

3. (currently amended) ~~Method~~ A method according to Claim 1, further comprising the steps of reducing the quantity of the hydrocarbon-containing treatment gas fed to the treatment chamber ~~characterized in that,~~ when an opacity value, which is set or can be set, is exceeded~~, the quantity of the hydrocarbon-containing treatment gas (1) fed to the treatment chamber (3) is reduced (1)~~.

4. (currently amended) ~~Method~~ A method according to ~~one of the preceding Claims 1 to 3, characterized in that~~ Claim 1, wherein a pressure between 3 and 20 mbar is set in the treatment chamber [[(3)]].

5. (currently amended) ~~Method~~ A method according to ~~one of the preceding claims, characterized in that~~ claim 1, wherein alkanes, alkenes, alkines or derivatives of the afore-mentioned, to which hydrogen can be admixed, are used as hydrocarbon-containing treatment gas [[(1)]].

6. (currently amended) ~~Device~~ A device for carburizing at subatmospheric ~~pressures, having~~ pressures comprising: at least one treatment chamber, at least one feeding line, by way of which a treatment gas containing hydrocarbons is fed to the treatment chamber, and at least one evacuating line by way of which the exhaust stream is withdrawn from the treatment chamber by means of an evacuating device,

~~characterized in that~~ wherein at least one valve [[(2)]] is arranged in the feeding line [[(1)]], at least one device [[(10)]] for determining the opacity of the gaseous atmosphere prevailing in the treatment chamber [[(3)]] is arranged in the treatment chamber [[(3)]], and/or at least one opacity probe [[(5)]] is arranged in the evacuating line [[(4)]], and an analyzing unit [[(9)]] is provided which, as a function of the opacity of the exhaust stream [[(4)]] determined by means of the device for determining the opacity of the gaseous atmosphere prevailing in the treatment chamber [[(3)]], and/or by means of the opacity probe [[(5)]], regulates the feeding of the hydrocarbon-containing treatment gas [[(1)]] into the treatment chamber [[(3)]] by means of driving the valve [[(2)]].

7. (currently amended) ~~Device~~ A device according to Claim 6, ~~characterized in that~~ wherein the valve [[(2)]] is a control valve.

8. (currently amended) ~~Device~~ A device according to Claim 6 [[or 7]], ~~characterized in that~~ wherein the analyzing unit [[(9)]] permits the setting of an opacity limit value.